

Conventional models underestimate the tax rate for the lowest incomes and overestimate the tax rate for the highest incomes.

Why Do Economists Disagree About Tax Reform?

The Tax Cut and Jobs Act of 2017 represents the most significant change in U.S. taxation since 1986. What difference does it make?

Some studies suggest the reform is regressive.

An example is the <u>Tax Policy Center</u> (TPC), which reports that "higher income households receive larger average tax cuts as a percentage of after-tax income, with the largest cuts as a share of income going to taxpayers in the 95th to 99th percentiles of the income distribution." The <u>Congressional</u> <u>Budget Office (CBO) and the Joint</u> <u>Committee on Taxation (JCT) reach</u> similar conclusions.

Others disagree.

A <u>new study</u> by Alan J. Auerbach (University of California, Berkeley), Laurence J. Kotlikoff (Boston University) and Darryl Koehler (The Fiscal Analysis Center) finds that the reformed system is just as progressive as the current system – whether measured by lifetime tax rates or lifetime consumption or merely the way the reform treats the very rich.

Problems with conventional models.

The studies by the TPC, the CBO and the JCT suffer from four major

shortcomings. First, they focus on current, instead of remaining lifetime taxes. Second, they ignore the interaction of tax changes and entitlement programs. Third, they lump together the young and the old, mixing households in very different positions relative to their lifetime incomes. Fourth, they ignore the reform's impact on capital and wages.

Remaining lifetime taxes.

A typical worker doesn't stay at the same place in the income distribution over the whole of her work life. Entry wages tend to be low, rise to a peak after several decades and then fall toward the end of a career. To evaluate the effects of a change in the tax law, we must consider all phases of a person's work life, as well as income sources during retirement.

Entitlement programs.

Tax changes produce income changes which affect eligibility for such entitlements as Social Security and Medicare. Unlike the other studies, the AKK study incorporates the interaction of federal taxes with 30 different entitlement programs, as well as with state and local taxes.

Cohort comparisons.

Conventional models treat people at the same income level as though they were similar, lumping together young people with years of taxes ahead of them with seniors who have already paid their taxes. They also lump together people who are paying into elderly entitlement programs with people who are drawing benefits. Sensible statements about progressivity need to compare people who are roughly the same age.

Impact on capital and labor.

For as long as there has been a corporate income tax, economists have wondered who pays it. Consumers? Shareholders? Workers? A related question is: to what extent do corporate income taxes in various countries affect the flow of capital across international boundaries? Until recently, economists did not have the tools to be

able to answer these questions empirically. So, they turned to ad hoc assumptions. For example, the CBO and the JCT assume that one-fourth of the corporate income tax is paid by labor – with the remainder

of the burden falling on shareholders. That was also the assumption of the Treasury Department, until last year – when it upped its estimate of labor's share of the burden to 70 percent. (See <u>this summary</u>.)

On international capital movements, the traditional models generate little movement. They do so by modeling the U.S. largely as a closed economy, which is patently false. Some have suggested that even if there is repatriation of capital, the funds will not be invested in job-creating activities. But once again, these are ad hoc assumptions – not based on theory or evidence.

A dollar reduction in capital taxes results in more than a dollar increase in wages.

More scientific answers to these questions are now available. Kotlikoff and his colleagues spent three years developing an international model of capital flows, including capital taxation in every major economy in the world. (See here). The model has 3 ½ million equations and each separate run takes several computers operating continuously for about 14 hours. Here are some findings:

- The international flow of capital is highly sensitive to corporate tax rates.
- In the case of the recent U.S. tax reform, the model predicts a \$7.5 trillion increase in the US capital stock.
- The burden of corporate income taxation falls almost completely on labor – not only in this country, but all over the world.
- In general, a dollar reduction in capital taxes

results in more than a dollar increase in wages – a result consistent with traditional economic theory (see below).

• In the case of the recent U.S. tax reform, the model estimates, from the position of our prior law, that when

all dynamic changes are accounted for each \$1 decrease in capital taxes leads to greater than a \$1 rise in wages.

 As a result, the average household can expect an increase of about \$4,000 per year in wage income, after all adjustments are made.

Measuring inequality, the right way.

The correct way was described in an <u>NBER</u> <u>Working paper</u> by Auerbach, Kotlikoff and Koehler in 2016. A <u>nontechnical description</u> is at the Goodman Institute web site. Essentially, this method measures the potential lifetime



consumption of every household, after accounting for all taxes and all entitlement programs. To take one example:

- Among people in their 40s, the top 1% has 18.9 percent of the age group's wealth (counting human and nonhuman capital); but they can expect to enjoy only 9.2 percent of the spending.
- At the other end of the spectrum, the bottom 20% has only 2.1 percent of the wealth; but they can look forward to 6.9 percent of the spending.
- So, the fiscal system (taxes plus spending) more than cuts the resources in half for the top 1% and more than triples the resources available to the bottom 20%.

Virtually all income groups can expect substantial benefits from tax reform.

an increase in average wages of about \$4,000 per household per year, because of a large inflow of capital from abroad, which will occur over time.

Elderly retirees don't benefit as much because they are no longer receiving wages and they have fewer years of life remaining. Even so, 60-year-old households can expect a gain of more than \$12,000 from lower taxes alone.

AKK study results: Impact on inequality.

The rich will receive many more dollars of tax relief, because their tax burden was so much higher to begin with. But the percentage gain

> is about the same across all income groups. Within every age group, the rich will pay essentially the same share of taxes (net of transfer payments) and experience essentially the same percentage increase

Our fiscal system is a powerful redistributor of resources. One cannot properly measure inequality if one ignores it.

AKK study results: Impact on average-income families.

Virtually all income groups can expect substantial benefits from tax reform. Among the findings:

- For middle class households in their 20s, the lifetime benefits of tax reform average \$68,952 in present value.
- For the average middle class 30-year-old household, tax reform is worth \$75,233.
- For the average middle class 40-year-old household, the reform is worth \$67,932.

Roughly 30 percent of these gains are from lower taxes. The remainder is the result of higher wages and a larger economy. That study predicts in living standard as the middle class and poor. There is virtually no change in the progressivity of the tax system, either from the tax cuts directly or from the effects of a larger economy paying higher wages. For example:

- Among people in their 40s, the wealthiest 1% could expect to enjoy 12.9% of the group's remaining lifetime consumption before tax reform. Under the new system, that number is slightly lower at 12.8%.
- For the middle fifth of 40-year-old income earners, the share inches from 13.9% to 13.8%.
- For the bottom fifth, the share barely moves from 5.8% to 5.7%.

How Conventional forecasting goes wrong.

Because of the errors described above, the conventional approach tends to underestimate the current tax rate faced by those at the bottom



of the income ladder and overestimate the tax rate faced by those at the top. It also tends to underestimate the extent to which tax reform reduces the lifetime tax rate for low-income families and overestimate the extent to which rates have been cut for those with high incomes.

A <u>comparison of expected tax rates</u>, contrasting the estimation method used by the Joint Committee on Taxation with the more accurate method used by Auerbach, Kotlikoff and Koehler, shows that:

- People with incomes below \$10,000 can expect to receive about twice the tax relief as what is predicted using the JCT method.
- Those earning \$10,000 to \$20,000 can expect about 50 percent more tax relief.
- For those in the \$20,000 to \$30,000 range, the tax reduction is, again, about twice what the JCT method predicts.

At the other end of the income scale:

 The JCT method overstates tax relief for millionaires by about half again and there is a similar over-estimate for those in the \$500,000 to \$1 million range.

 For those who earn \$200,000 to \$500,000, the JCT method overestimates tax relief by about one third.

Capital taxation and traditional economic theory.

Interestingly, the results obtain by the AKK study are quite consistent with traditional economic theory. And the explanation of that theory that economists most often point to is <u>co-authored by Larry Summers</u>, who served as Secretary of the Treasury under Bill Clinton. More recently, Summers emerged as a <u>vocal</u> <u>critic</u> of the tax reform bill, causing some of his colleagues to ask whether he no longer believes in his own work. (See, for example, <u>Kotlikoff's</u> response to Summers.)

Here are some other explanations of traditional theory by some of the nation's best economists: <u>Greg Mankiw</u> (Harvard), <u>Casey Mulligan</u> (Chicago), <u>John Cochrane</u> (Chicago/Stanford) and <u>Steven Landsburg</u> (Rochester).



6335 W Northwest Hwy - #2111 • Dallas, TX 75225 • email: info@goodmaninstitute.org • +1 214 302.0406

The Goodman Institute for Public Policy is a 501(c)(3) nonprofit organization and contributions are tax-deductible to the fullest extent of the law. A tax receipt will be issued directly from the Goodman Institute within 2 business days after the receipt of your donation.